FEDERAL UTILITY PARTNERSHIP WORKING GROUP SEMINAR

April 19-20, 2018 Nashville, TN

TVA UESC Best Practices

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Hosted by:





Today's Talk

- What is TVA?
- TVA's Federal Energy Services Program (FESP)
- Where we offer UESCs
- TVA UESC process
- TVA UESC projects
- Best Practices
- Contracting process Why we are unique





About TVA

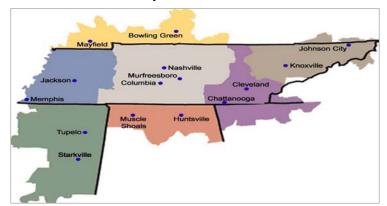


TVA Act

- Navigation and flood control
- Electricity generation
- Industrial and agricultural development
- Support of national defense

The Tennessee Valley Authority is a corporate agency and instrumentality of the United States of America

- Serves parts of 7 states, 56 directly served customers, 154 local power companies and 80,000 square miles
- Federal customers include 6 large directly served facilities and numerous local power company served facilities
- Energy prices below national average
- Receives no taxpayer money
- Assists state and local governments with economic development







Why We're Unique

Owned by the People

No stockholders

Presidentially appointed Board of Directors

Provides service & generates value for stakeholders

Directly served Federal & Industrial customers

No taxpayer dollars

Local Power Company partnerships

Partner for economic growth





Our Mission



Energy



Environment



Economic Development

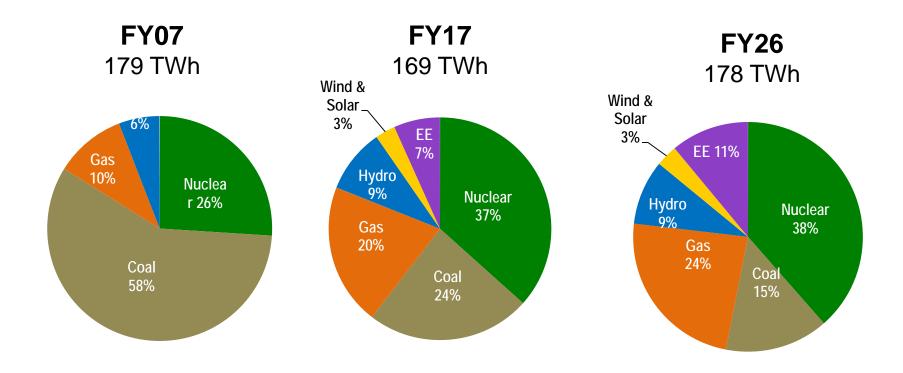




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A Diverse Power Supply

Energy from non-emitting resources increases from 32% in FY07 to 61% by FY26







TVA's Federal Energy Services Program (FESP)

- Provides value-added energy services to federal partners to help them meet their mission while achieving energy goals
- Utilizes cost-effective Utility Energy Service Contract (UESC) vehicle to maximize benefit
 - Reduces operations and maintenance costs



- Improves facilities and infrastructure
- Helps federal customers remain in the Valley and thrive!





TVA FESP

- FESP is available to directly-served AND local power company-served federal agencies in TVA's service territory
- TVA partners with federal customers to identify and implement energy management and water conservation opportunities
- One-stop-shop for audits, design, construction, and financing of UESC projects, with TVA managing all phases of the project
- TVA subcontracts with qualified energy services providers
- Typical projects have multiple measures, capital cost \$4 \$12 million, with paybacks from 4 -15 years
- TVA has a long history of successful FESP projects and continues to focus on customer relationship and satisfaction





Why We Offer UESCs

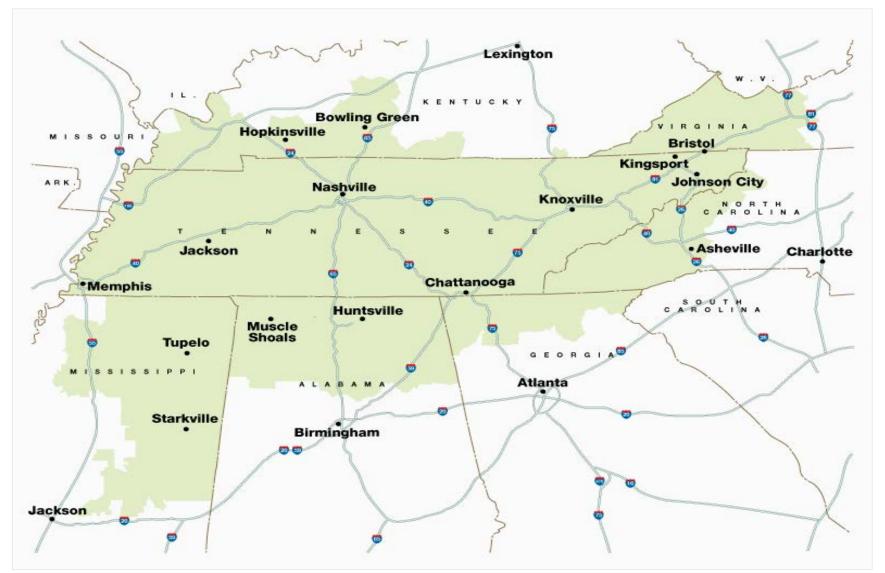


Our Federal Partners Are Important To Us





Where We Offer UESCs







TVA UESC Process

Preliminary Assessment (PA)

Investment Grade Audit (IGA)

Implementation Construction

Performance Assurance





Services Provided by TVA

Technical Services

- Preliminary Assessment
- Investment Grade Audit
- Engineering & Design
- Construction & Installation
- Performance Assurance
- Measurement & Verification
- Training
- O&M Services
- Project Management

Financial Services

Project Financing





Typical Energy Conservation Measures (ECM)

- Boiler Improvements
- Chiller Improvements
- Air Handling Equipment
- Controls
- Motors and Drives
- HVAC Upgrades
- Lighting Retrofits
- Building Envelope
- Water Distribution

- Metering
- EnergyManagementSystems
- Pumping Systems
- Decentralization of Domestic Hot Water Systems
- Decentralization of Steam Plants
- Ground Source Heat Pumps





TVA UESC Projects

- Offering UESCs since 1999, over 30 projects
- Past projects: Redstone Arsenal, Ft. Campbell,
 NSA Mid-south, IRS, NAS Meridian
- Current projects (development and implementation)
 - Redstone Arsenal
 - Ft. Campbell
 - Naval Support Activity Mid-south
 - Abernethy Federal Building Courthouse, Aberdeen, MS
 - DOE Paducah Site
 - NASA Marshall Space Flight Center









Best Practices

Develop a strong UESC team

Communicate, communicate, communicate!

For more complexe technologies do investigative studies early

Utilize FEMP contracting and other document templates

Think broadly during the PA phase

Weekly project reviews

Incentivize subcontractors for early completion (carrots & sticks)

FEMP Training is imperative... and excellent

Bundle many ECMs

Take advantage of mixing direct funding (buy downs) with financing

Make sure design engineer works closely with construction subs Develop
Performance
Assurance Plan up
front

Competition in subcontracting – seek best value for the government

Include
Contracting/Legal
from the very
beginning





Economy Act

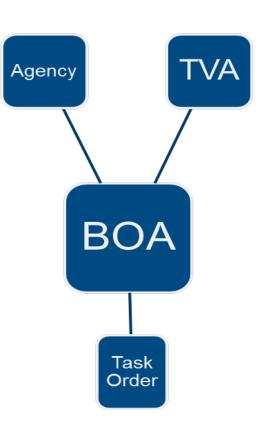
- The Economy Act (31 U.S.C. 1535) authorizes agencies to enter into agreements to obtain supplies or services from another agency.
- The Economy Act applies when more specific statutory authority does not exist.
- But more specific statutory authorities do exist. For example:
 - 42 U.S.C. 8256(c)1 authorizes and encourages agencies "to participate in programs to increase energy efficiency and for water conservation or the management of electricity demand conducted by gas, water, or electric utilities and generally available to customers of such utilities."





Basic Ordering Agreement (BOA)

- BOA is an "umbrella" agreement between the parties
 - Contains contract clauses applying to future contracts between the parties during its term
 - Contemplates future agreements specific to each phase of the UESC process
- Used to expedite contracting for uncertain requirements when specific quantities and prices are not known at time of execution of agreement
- Issue task orders for specific supplies or services
 - Task orders incorporate by reference the terms of the BOA







Federal Acquisition Regulations (FAR)

- TVA is not subject to the FARs.
- The FARs are issued under the authority of the Office of Federal Procurement Policy Act (OFPPA). Since TVA is generally exempt from the OFPPA, it is exempt from the FARs.
- In particular, the 1983 amendments to the OFPPA make it clear that TVA is not subject to the Act. The amendments define "executive agency," to which the OFPPA applies as:
 - (A) an executive department specified in section 101 of title 5;
 - (B) a military department specified in section 102 of such title;
 - (C) an independent establishment as defined in section 104(1) of such title; and
 - (D) a wholly owned Government corporation fully subject to the provisions of chapter 91 of title 31 [41 U.S.C. § 403(1) (1994)].
- TVA has agreed to comply with a limited number of FAR provisions in a BOA, but only in very limited circumstances.





Thank You!

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